ACTUARIAL VALUATION REPORT

DESIGNED FOR

THE COUNTY OF LOUDOUN, VIRGINIA
VOLUNTEER FIRE/RESCUE
LENGTH OF SERVICE RETIREMENT PLAN

For Plan Year: July 1, 2008 through June 30, 2009

Every year an Actuarial Valuation is performed using accepted actuarial principles and practices. Plan funding should be reviewed in the context of a long-term promise made to your plan participants. Our goal is to provide you basic information of the financial details of your plan in an understandable fashion.

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DISCUSSION

COVERAGE OF THIS REPORT

This report covers the operations of ***the Loudoun County Volunteer Fire/Rescue Length of Service Retirement Plan*** during the period July 1, 2007 through June 30, 2008 and sets forth the recommended contribution for the Plan year ending June 30, 2009.

PLAN

The Plan was established on July 1, 1986 in order to provide for the exclusive benefit of Active Volunteers of one or more Loudoun County fire, rescue, or emergency medical services. The primary purpose of the Plan is to provide income for eligible volunteers of the County's Fire and Rescue services in recognition of their commitment and service to Loudoun County.

In our valuation, cost calculations are based on the Plan as effective July 1, 1986, most recently amended and restated effective November 1, 2003. A summary of the Plan may be found on Pages 12-13.

DATA

Employee census information as of November 1, 2007 was supplied to VFIS by Loudoun County and projected forward to July 1, 2008 for purpose of this valuation. We did not audit the data for accuracy or completeness. Asset information as of July 1, 2008 was provided by Hartford Life Insurance Company.

PLAN COSTS FOR 2008

The 2008 recommended contribution is $701,629. Below is a brief summary of the major components of the recommended contribution.

Source	$
Normal Cost	574,226
Amortization for 2005 Fresh Start Liability	127,403
TOTAL RECOMMENDED CONTRIBUTION	**701,629**

The actuarial basis of cost calculations may be found on Page 14.

DISCUSSION
(Continued)

PLAN CHANGES FOR 2004

Plan changes that were incorporated effective November 1, 2003 include:

- Increasing the Benefit Formula for future service to $12 from $10.
- Decreasing the amount of service required to achieve various levels of vesting.
- Allowing participants, who reach normal retirement age, to continue participation in the Plan

ANNUITY PURCHASES

When a participant reaches their normal retirement age under the Plan, the sponsor makes a withdrawal from the Plan's general assets to purchase a single premium immediate annuity to cover the retiree's benefit payments.

During the 2007-2008 Plan year, annuities were purchased to provide for the benefit payment of 20 new retirees, and benefits were increased for 1 retiree already collecting benefits due to the 2003 plan enhancements. As of July 1, 2008, there are 242 retirees and beneficiaries receiving total benefit payments of $42,554.80 per month.

By purchasing annuities, both the retiree's liability and the associated mortality and investment risk are transferred to an insurance carrier. Since the Plan is no longer responsible for the resulting liability, retirees that have had an annuity purchased are excluded from our liability calculations and participant counts.

ACTUARIAL ASSET VALUE

In our actuarial valuation, the Fair Market Value of assets was used with no smoothing of the actuarial (gains)/losses.

FUNDING POLICY

Loudoun County funds the Plan annually based on a recommended contribution calculated using the Entry Age Normal Frozen Initial Liability (EANFIL) funding method. Under the EANFIL funding method, the following steps take place to calculate the recommended contribution.

DISCUSSION
(Continued)

FUNDING POLICY (cont'd)

A. The amount required, at the assumed retirement date, to guarantee each participant's projected monthly benefit payable for life, with a minimum of 120 payments, is calculated. This future value amount is called the maturity value.

B. An amount is calculated that, if contributed annually starting from the participant's date of membership through Entitlement Date, would accumulate at the assumed interest rate to equal the maturity value. This annual amount is the Plan's Normal Cost.

C. Since no deposits were made prior to the Plan's effective date, the total value that would have accumulated needs to be contributed. This accumulated value is known as the Frozen Initial Liability (FIL).

D. The FIL is amortized (spread) over future years to ensure that the necessary funds are available to pay the participants' benefits. Loudoun County has elected a 20-year amortization schedule beginning with the 2005 renewal.

E. Under this method, any actuarial experience (gains)/losses will be spread over the Plan's future Normal Costs in order to minimize year to year fluctuations in the recommended contribution.

The recommended contribution is determined by adding the Normal Cost and the amortization payment.

The above explanation is a description of the funding method in the simplest terms and is not meant to be a complete description. However, it does provide a basic framework as to how the annual recommended contribution is calculated.

LIMITATIONS OF THE VALUATION REPORT

This report is intended for the sole use of Loudoun County and is intended only to supply information for Loudoun County with the stated purpose of the report and may not be appropriate for other purposes. Reliance on information contained in this report by anyone for other than the intended purposes, puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the report's conclusions. Accordingly, no person or entity, including Loudoun County should base any representations or warranties on the statements or conclusions contained in this report, without the written consent of VFIS.

SUMMARY OF PLAN COSTS
AND COVERAGE FOR THE PAST 3 YEARS

	2006	2007	2008
PLAN COVERAGE			
Number of Retired Participants	0	0	0
Percentage Increase/(Decrease)	(100.0%)	0.0%	0.0%
Number of Vested Terminations	393	428	477
Percentage Increase/(Decrease)	19.8%	8.9%	11.1%
Number of Active Participants	1,302	1,367	1,345
Percentage Increase/(Decrease)	10.7%	5.0%	(1.6%)
Annual Valuation Total Points Earned for Active Participants	256,233	273,617	291,589
Percentage Increase/(Decrease)	(5.9%)	6.8%	6.6%
Average Points Earned for Active Participants	196.7	200.2	216.8
Percentage Increase/(Decrease)	(15%)	1.8%	8.3%
Active Participants who Earned a Year of Service	623	656	668
	(7.1%)	5.3%	1.8%
Average Service for Active Participants	9.94	9.63	9.51
	7.9%	(3.1%)	(1.2%)
Average Age for Active Participants	40.19	39.96	39.70
	.1%	(.1%)	(0.7%)
PLAN COSTS			
Present Value of Benefits	$14,541,854	$15,399,944	$15,785,085
Present Value of Assets	$9,989,052	$10,655,682	$11,144,542
Recommended Contribution	$664,950	$719,556	$701,629
Percentage Increase/(Decrease)	7.38%	8.21%	(2.49%)

FINANCIAL SUMMARY AS OF JULY 1, 2008

(Source: Hartford Life Insurance Company)

	JULY 1, 2007 $	JULY 1, 2008 $
Assets (Market Value)		
Fixed Income Group Annuity Contract	10,655,682	11,144,542
TOTAL ASSETS	**10,655,682**	**11,144,542**
Transactions During Year Ending June 30, 2008		
Market Value as of July 1, 2007		10,655,682
Income:		
Contributions		727,556
Interest Income		498,140
Realized Gains/(Losses)		
TOTAL INCOME		**1,225,696**
Disbursements:		
Benefit Payments to Participants		0
Death Claims		40,405
Annuity Purchases for Participants		688,431
Administrative Fee		8,000
TOTAL DISBURSEMENTS		**736,836**
Net Income		488,860
Net Change in Unrealized Gains/(Losses)		
Net Change in Assets		
Market Value as of July 1, 2008		**11,144,542**

FUND HISTORY

The Plan's assets are invested in a fixed-income Group Annuity offered through Hartford Life Insurance Company. The contract credits a fixed amount of interest to the Plan's account on a monthly basis. Hartford Life has the discretion to change the rate of interest credited at any time, but the rate cannot be less than 3.0%. Please refer to the Group Annuity Contract for more information regarding the nature of this investment.

The following table shows the historical values of the Plan's assets and the crediting interest rate at the end of each Plan year.

Year Ended June 30st	**Market Value $**	**Current Interest Crediting Rate %**
2008	11,144,542	4.60
2007	10,655,681	4.85
2006	9,989,052	4.85
2005	9,653,624	5.20
2004	9,165,002	5.20
2003	8,220,963	5.55
2002	7,480,983	5.55
2001	6,889,440	5.50
2000	6,443,484	5.05
1999	5,610,800	4.95
1998	5,727,486	5.15
1997	4,435,965	5.25
1996	4,021,037	5.25
1995	3,401,898	5.60
1994	2,682,748	5.10
1993	2,179,227	6.35
Prior to November 1, 1999, assets were invested in a CIGNA group annuity contract		

PARTICIPANT RECONCILIATION AS OF JULY 1, 2008

	Active	Terminated Vested	Active Retired	Total
Participants as of July 1, 2007	**1257**	**428**	**110**	**1795**
Terminations				
Vested	(58)	58	0	0
Non Vested	(182)	0	0	(182)
Retirements	(2)	(8)	0	(10)
Deaths	(2)	(1)	(4)	(7)
*Status Changes	(10)	0	10	0
New Participants	226	0	0	226
Participants as of July 1, 2008	**1229**	**477**	**116**	**1822**

*Status Changes

Active:	Terminated Vested to Active	1
	Active to Active Retired	(11)
	Net	(10)
Terminated Vested:		
	Terminated Vested to Active	(1)
	Death to Term Vested	1
	Net	0
Active Retired:		
	Active to Active Retired	11
	Active Retired to Term Retired	(1)
	Net	10

RESULTS OF
ACTUARIAL VALUATION AS OF JULY 1, 2008

(1)	Number of Participants:		
	Retired Participants		0
	Vested Terminations		477
	Active Participants		1,345
	TOTAL		**1,822**
(2)	Present Value of Benefits:		
	Retired Participants	$	0
	Vested Terminations	$	4,541,299
	Active Participants	$	11,243,786
	TOTAL	**$**	**15,785,085**
(3)	Actuarial Value of Assets	$	11,144,542
(4)	Unfunded Actuarial Liability (UAL)	$	1,528,241
(5)	Present Value of Future Normal Costs: (2) - (3) - (4)	$	3,112,302
(6)	Present Value of Future Service	$	2,706,861
(7)	Weighted Average Temporary Annuity		5.4200
(8)	Normal Cost: (5) / (7)	$	574,226
(9)	Amortization of UAL	$	127,403
(10)	Total Recommended Contribution (9) + (10)	$	701,629

Note: Loudoun County has elected a 20-year amortization schedule beginning with the 2005 valuation. A Fresh Start was completed and the Unfunded Actuarial Liability of $1,606,253 is scheduled to be amortized over a 20 year period.

ACTUARIAL VALUES
ENTRY AGE NORMAL FROZEN INITIAL LIABILITY

The following is a series of actuarial values, which are used to measure a plan's funding status.

A. **Present Value of Benefits** - $15,785,085.00. The amount of money invested today, based on the Plan's assumed rate of return, sufficient to provide the members' projected benefits.

B. **Present Value of Accrued Benefits** - $12,497,606.00. The amount of money invested today, based on the Plan's assumed rate of return, sufficient to provide the members' accrued benefits (benefits earned to date) at Entitlement Age.

C. **Present Value of Vested Accrued Benefits** - $12,059,904.00. The amount of money invested today, based on the Plan's assumed rate of return, sufficient to provide the participants' vested accrued benefits (vested benefits earned to date) at Entitlement Age.

D. **Assets** - $11,144,542.00. The amount currently invested in the side fund. If you subtract this amount from the above figures, the result is an estimate of the net amount needed in a single sum to fund either the projected or accrued benefits.

E. **Frozen Initial Liability** - $1,606,253.00. This is the amount that was established July 1, 2005 due to changes in actuarial assumptions and plan design.

F. **Frozen Initial Liability Amortization Period** - 20 Years. This is the number of years established as of the July 1, 2005 to pay off the Frozen Initial Liability.

G. **Remaining Unfunded Liability** - $1,528,241.00. This is the amount of the liability, which currently remains to be paid down.

H. **Recommended Contribution** – Under acceptable funding rules, the recommended contribution for the current year is $701,629.00. This contribution does not include the Administrative Fee.

AMORTIZATION SCHEDULE

Recommended Contribution

Date	Description	Amount		Amortization Period		Amortization
		Initial $	Remaining $	Initial	Remaining	Payment $
07/01/05	Initial Liability	1,606,253	1,528,241	20	17	127,403
TOTAL			**1,528,241**			**127,403**
Remaining Unfunded Actuarial Liability			**1,528,241**			

AGE, SERVICE AND AVERAGE POINTS DISTRIBUTION

Age as of July 1, 2008	YEARS OF SERVICE *						Totals
	00-00	01-09	10-19	20-29	30-39	40 +	
Under 25	122 53.3	148 310.6	- -	- -	- -	- -	270 194.4
25 – 34	60 62.1	165 307.5	51 189.8	- -	- -	- -	276 232.4
35 – 44	29 42.5	154 322.4	96 240.7	41 220.0	- -	- -	320 259.4
45 – 54	25 38.8	90 308.1	62 251.5	45 205.3	21 142.3	- -	243 232.6
55 – 64	23 36.3	40 292.2	28 260.7	24 116.7	28 118.0	1 267.0	144 181.9
65 and over	16 24.6	13 149.0	20 192.6	13 96.2	9 86.7	21 49.3	92 100.5
TOTALS	**275 49.7**	**610 307.7**	**257 231.6**	**123 181.4**	**58 121.9**	**22 59.2**	**1345 216.8**

AVERAGE AGE: 39.70

AVERAGE SERVICE*: 9.51

AVERAGE POINTS+: 216.8

* Average Service represents elapsed time only and does not include banked years

\+ Points Shown are the Average Earned during the Year November 1, 2006 through October 31, 2007

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date:	July 1, 1986; most recently amended and restated effective November, 1 2003.
Eligibility:	For crediting service, attainment of age 16 and active participation in one of the County's Volunteer Emergency Service Organizations. Must be 18 or older to receive benefits from the Plan.
Normal Retirement:	Age 55.
Early Retirement:	Not Applicable.
Deferred Retirement:	Participants may defer the payment of their service award in order to continue to earn additional years of Fire/Rescue Service after Normal Retirement Age.
Monthly Benefit Formula:	The sum of (a) and (b) below: a) \$10 multiplied by Years of Fire/Rescue Service completed before November 1, 2003. b) \$12 multiplied by Years of Fire/Rescue Service completed after November 1, 2003.
Maximum Years:	The maximum years of Fire/Rescue Service that may be earned is 25.
Maximum Benefit:	For participants, who earn a year of Fire/Rescue Service after November 1, 2003, \$300 per month. For all other participants, \$250 per month.
Participant Contributions:	None.

<u>SUMMARY OF PRINCIPAL PLAN PROVISIONS (Cont'd)</u>

Normal Form of Benefit: 10 Year Certain and Continuous Annuity.

Termination of Service: The following vesting schedule applies:

Years of Fire/Rescue Service	Participants **<u>without</u>** Fire/Rescue Service after November 1, 2003	Participants **<u>with</u>** Fire/Rescue Service after November 1, 2003
0	0%	0%
1	0%	0%
2	0%	0%
3	0%	20%
4	0%	40%
5	30%	60%
6	50%	80%
7	70%	100%
8	80%	100%
9	90%	100%
10	100%	100%

Disability Benefit: 100% of the Participant's vested accrued benefit payable as an actuarially equivalent lump sum

Spouse's Benefit: 100% of the Participant's vested accrued benefit payable as an actuarially equivalent lump sum

ACTUARIAL BASIS OF COST CALCULATIONS

Mortality:	1971 Group Annuity Mortality Table with a 2 year setback.
Interest:	5.50% compounded annually.
Turnover of Employees:	Based on the County's actual experience; actual rates used are from the T-6 actuaries' table. Sample rates are as follows:

AGE	ANNUAL RATE
Under 25	7.9%
30	7.4%
35	6.9%
40	6.1%
45	5.2%
50	3.6%
55 and Over	0.0%

Future Points Level:	It was assumed that all participants will continue to accrue Fire/Rescue Points at their rate earned during the period November 1, 2006 through October 31, 2007.
Retirement Age:	All active participants were assumed to retire at age 55. Any active participants beyond age 55 were assumed to continue for one more year.
Value of Assets:	Fair Market Value
Expenses and Contingencies:	No loadings have been added for administrative expenses or contingencies. A 7.5% load for Ancillary benefits (Disability) has been included.
Funding Method:	Entry Age Normal Frozen Initial Liability